

S8 – Monitoring and Assessment

Preliminary Draft “Fact Sheet”

INTRODUCTION

The Washington Department of Ecology (Ecology) is working on reissuing the Phase I, Western and Eastern Washington Phase II Municipal Stormwater Permits. Ecology has prepared preliminary draft sections of Permit language and is accepting informal comments on these sections until **11:59 p.m. on December 2, 2022. Send your comments to:** <https://wg.ecology.commentinput.com/?id=T3iSC>.

Or mail hard copies to:

Municipal Stormwater Comments
WA Department of Ecology
Water Quality Program
PO Box 47696
Olympia, WA 98504-7696

PROPOSAL BACKGROUND

Ecology is requesting informal comments on ways to adapt the Eastern Washington Phase II Municipal Stormwater Permit (Permit) Section S8 – Monitoring and Assessment for the 2024 Permit cycle. In the 2009 Pollution Control Hearing Board (PCHB) ruling on appeal of the Phase II Permit¹, the PCHB concluded that Ecology require monitoring in future Phase II Permits. Ecology and Permittees worked together to develop the current approach.

In past Permit cycles, all eastern Washington city and county Permittees participated in a robust and extensive process to identify, prioritize, and select stormwater management program effectiveness and source identification study topics and questions. Currently, this Permit section requires Permittees to implement those studies that were identified and approved, as well as develop new studies. The studies are designed to assess the effectiveness of the Stormwater Management Program elements (SWMP) or specific stormwater BMPs. In some cases, Permittees work together to conduct these studies – with one Permittee taking on the role of ‘Lead Entity’ and additional Permittees participating by providing in-kind services or contributing funding. In other cases, a single Permittee conducts a study on their own.

¹ Findings of Fact, Conclusions of Law, and Order (Phase II Municipal Stormwater Permit); February 2, 2009; Puget Soundkeeper Alliance, People for Puget Sound, Coalition of Governmental Entities v. State of Washington, Department of Ecology, Issue #15

The current Permit encourages collaboration between Permittees to meet this Permit section. There are ten designated Urban Areas in eastern Washington: Wenatchee, Ellensburg, Yakima, Sunnyside, Tri-Cities, Moses Lake, Walla Walla, Clarkston, Pullman, and Spokane. Any number of Urban Areas may work together on a single new study (e.g., all of the cities and counties in Yakima, Sunnyside, and Tri-Cities Urban Areas – or all EWA Permittees – can propose a single study as a regional group). This may result in up to, but no more than, ten new studies beginning by the end of the 2019-2024 Permit.

Since the 2013 Permit, 8 studies have been conducted, and 5 are underway. The following is a list of EWA effectiveness studies and lead entity:

1. Elementary School Stormwater Education Effectiveness Study: Drain Rangers Program (Kennewick)
2. Street Sweeping and Catch Basin Cleaning Comparison (Ellensburg)
3. Mobile Contractor Illicit Discharge Education & Outreach Effectiveness Study (Wenatchee)
4. Sand Filter Sidewalk Vault BMP (Spokane County)
5. BMP Inspection and Maintenance Responsibilities for Privately Owned Facilities (Yakima County)
6. Bioretention Soil Media Thickness Study (Spokane County)
7. Sharp Avenue Permeable Pavement Pollutant Removal Efficacy (Spokane)
8. Garland Avenue Biochar Amended Storm Gardens Pollutant Removal Efficacy (Spokane)
9. Private Residential BMP Owner Awareness (Wenatchee)
10. Business Education and Outreach (Fast-Food Restaurant) (Ellensburg)
11. Car Wash Wastewater Management Education and Outreach Effectiveness Study (Yakima)
12. Non-Vegetated Biofiltration Swale Study (West Richland)
13. Seasonal Variability of Soil Media (Spokane)

Early input sent to Ecology on the 2024 Permit included several suggestions and recommendations for:

- flexibility,
- additional state resources to support permit requirements,
- more defined structure to effectiveness study selection,
- an option similar to the WWA Stormwater Action Monitoring (SAM) structure, and
- expanded receiving water monitoring.

Ecology heard from some Permittees that this Permit section is working for them, and collaboration with other Permittees results in studies that are informative to their region of the state. Other Permittees reported struggling with implementing studies – from the challenges of developing a meaningful study question, capacity to conduct a study, equity in partnerships between lead entity and participating entities, to funding challenges.

In preparation of the 2019 Permit reissuance and in recognition of the differing climate and hydrogeologic settings in eastern Washington, Ecology asked the U.S. Geological Survey to evaluate existing information about stormwater impacts to receiving waters in eastern Washington and recommendations on a regional receiving water program. The review concluded that the receiving water monitoring approaches in Puget Sound and the Lower Columbia are not suitable for application in eastern Washington, and recommended instead focusing on Stormwater Management Plans (SWMP) or BMP effectiveness studies. We propose to continue following these USGS recommendations.

We are also proposing stormwater discharge monitoring as an effectiveness study option for EWA Municipal stormwater discharge characterization monitoring was the required in the 2007 Phase I Permit and continues today to be a monitoring option for all western Washington Permittees. Discharge monitoring is intended to characterize stormwater runoff quality and quantity at a limited number of locations (often an outfall) in a manner that allows analysis of pollutant concentrations and loadings, and changes over time. [Appendix 9](#)² in the western Washington Municipal Stormwater Permits outlines how discharge characterization monitoring is designed and implemented under an Ecology-approved Quality Assurance Project Plan (QAPP).

We are also open to exploring how EWA Permittees could participate in the pooled resources approach to regional monitoring and, specifically, the SAM's Effectiveness Studies and Source Identification Program.

Summary of the SAM Effectiveness Study and Source Identification Program.

The Stormwater Action Monitoring (SAM) program first became a monitoring option in S8 in the 2013 western Washington Permits following a multi-year stakeholder process that resulted in compelling consensus among stakeholder recommendations. Selecting and making annual financial contributions to SAM has been a compliance option under S8 since the program was launched in 2014. The Pooled Resources Oversight Committee (PRO-C) and Stormwater Work Group (SWG) oversee the finances, work products, decide which stormwater topics to address, and approve which studies are funded. The SWG, a formal stakeholder group, will continue to make decisions about SAM priorities and projects. SAM studies satisfy three strategic stormwater management categories: receiving water impacts, BMP effectiveness studies, and source identification projects.

² <https://apps.ecology.wa.gov/paris/DownloadDocument.aspx?id=279087>

SAM conducts regionally relevant projects that provide adaptive management feedback information to improve Permittees' stormwater management program implementation and to inform Ecology's Permit requirement and Stormwater Management Manuals. SAM projects are prioritized and approved by a formal stakeholder group. SAM funding currently comes from WWA Permittees, WSDOT, and the US NAVY. Ecology maintains an account for the Puget Sound receiving water studies, a separate account for the Lower Columbia River receiving water study, and a combined account for Effectiveness Studies and Source Identification. **(Note to reader:** If this option were open to EWA Permittees, they would contribute to the Effectiveness Studies and Source Identification Program only.)

Process for selecting SAM studies.

The SWG gathers stakeholder input and sets priority topics for SAM studies. Proposals are solicited, reviewed by SWG members, and permittees are asked to vote for their preferred projects. The SWG approves all SAM funded studies. SAM projects provide regionally applicable information to improve how stormwater is managed either by informing Permittees' or developers' implementation of BMPs or by improving Ecology's permits, guidance documents, or BMPs in the Stormwater Management Manual. SAM studies work together to provide information about how our overall approach to stormwater management is working. For a list of [SAM Effectiveness studies, see webpage](#)³.

Permittees participate in many different ways to ensure relevant SAM studies are funded. Permittees propose studies, volunteer to be part of the study review committee, become formal members of the SWG or PRO-C, join subgroups such as the one to make recommendations on the next funding cycle's SAM study topic list and join study specific Technical Advisory Committees.

PROPOSED S8 OPTIONS FOR EASTERN WASHINGTON

The following three options are proposed to meet Permit Section S8 for Effectiveness Studies in the 2024 Permit cycle. Permittees would be asked to select one of the following options for the permit term, there would be no changes mid-Permit cycle.

1. Permittees would retain an option to conduct effectiveness studies in a manner similar to the requirements in the current EWA Permit – Section S8.

³ <https://ecology.wa.gov/Regulations-Permits/Reporting-requirements/Stormwater-monitoring/Stormwater-Action-Monitoring/SAM-effectiveness-studies>

2. If EWA Permittees express interest (and SWG is agreeable), Ecology would consider proposing Permit language that provides an option for the Permittees to contribute funding to the existing SAM Effectiveness Study and Source Identification fund. The following information helps EWA understand how this might work:
 - a. Contributions would be based on population (e.g., see column S8.B in [Appendix 11 of the WWA Phase II Permit](#)⁴ to get an idea of potential costs).
 - b. The payment is an annual payment that is required each year after opting into the program (e.g., by 12/2024, decide option and begin participation; by 8/2025, contribute funding).
 - c. Permittees that opt to contribute to the SAM Effectiveness Study and Source Identification Program would be responsible for participation in the development of study questions and selection of the Effectiveness Study.
 - d. Permittees may want to participate in the SWG, the Pooled Resources Oversight Committee – which oversees how the funding is being spent, the SAM Study Selection Subgroup – which shapes the study selection process – or any other informal SWG subgroups.
 - e. Some completed and active SAM Effectiveness Studies are relevant to EWA Permittees. We expect there to be future projects that are also relevant to EWA Permittees and implementation of the EWA Permit, particularly if any EWA Permittees participate.
3. Permittees would have an option to conduct stormwater discharge monitoring to characterize their municipal stormwater discharges in lieu of participating in either of the two regional effectiveness study options. This option would be similar to the option provided to western Washington Permittees and would follow the requirements found in Appendix 9 (see link above). Permittees that choose this option would monitor 1-3 discharge locations under an Ecology-approved QAPP. Data would be reported annually and entered into Ecology's Environmental Information Management (EIM) database. A final report would be produced after 3 years of monitoring.

We need input from Permittees to determine the feasibility for EWA Permittees to participate in the SAM Effectiveness Study and Source Identification Program to meet S8 Permit requirements. The SWG would need to be involved in future discussions on this proposal if EWA Permittees show enough interest in participating in the SAM Effectiveness Study and Source Identification Program. We request Permittees fill out this [brief survey](#)⁵, as well as provide comments on this proposal to aid Ecology in deciding on whether to include these proposed options in the formal draft permit, which is expected to be released for public comment in 2023.

⁴ <https://apps.ecology.wa.gov/paris/DownloadDocument.aspx?id=279089>

⁵ <https://www.surveymonkey.com/r/H57TNKH>